

**Regional and State Science Interest**  
**EPA Region 3 State Secretaries Meeting – August 24, 2017**  
**ORD Richard Yamada Session**

To help inform the discussion during the Office of Research and Development, Deputy Assistant Administrator Richard Yamada's session at the EPA Region 3 State Secretaries meeting on August 24, 2017, Region 3 solicited science interests from our State partners and all ten EPA Regions. In addition, we used a 2016 Environmental Research Institute of the States (ERIS) survey to further identify States' research/science needs and environmental challenges. Many of the States' priority areas identified by ERIS are also reflected in Region 3's solicitation of science interests. We hope to use the information below to identify research and tools that can assist States and Regions in addressing these challenges.

The information compiled below is organized according to priority areas identified by the 2016 ERIS State survey. The four identified priority areas and related issues are: Water, Emerging Contaminants/Toxics, Waste/Remediation, and Air. We have included the specific sub-areas within each topic as noted in the survey and have annotated with "**R3S&R**" where Region 3 States' and Regional interests correspond. To inform our conversation during the session today we have also included additional topic areas identified by Region 3 and other EPA regions (indicated by italics) that go beyond issues identified in the ERIS survey. More detailed information on the Region 3 State and Regional interest areas has also been attached.

**ORD Survey specific areas**

**1. Water**

- Water Quality/Surface Water Quality/GW Quality (**R3S&R**)
- Nutrients and NPS/Ag vs Groundwater/HABs
- MS4 Compliance and Stormwater (**R3S&R**)
- Water Quantity and Reuse (**R3S&R**)
- Water and Wastewater Infrastructure
- Small System DW and Wastewater Treatment
- Ensuring Safe DW/DW Disinfection Byproducts (**R3S&R**)
- Issues with Altered Hydrology
- *Harmful Algal Blooms*
- *Legionella in DW (hospitals and hotels)*
- *PFCs in public and private water supplies and in surface waters.*
- *Contaminated water in abandoned mines pools*
- *Wildfire effects on drinking water*

**2. Emerging Contaminants/Toxics**

- Manage new chemicals of emerging concern and existing chemicals (**R3S&R**)
  - *pre-cursors/by-products/derivatives such GenX.*
- Improve and understand process (**R3S&R**)

- Adapt and respond to emergencies
- More info for PFAS, surface water standards, fish consumption and biosolids advisory levels (**R3S&R**)
- *New obligations in TSCA21 program*
- *CDC Blood-lead levels impact to clean-up programs*
- *Concentrations of Dioxins, PCBs and Arsenic*

### 3. **Waste/Remediation**

- Remediation and changing standards: soil, GW, surface water, sediment (**R3S&R**)
- Vapor Intrusion (**R3S&R**)
- Chlorinated solvent GW plumes
- Remediation of legacy contaminants ranging from PBTs to nutrients (**R3S&R**)
- Emerging contaminants (e.g. PFAS) (**R3S&R**)
  - *action levels for RCRA Corrective Action sites, Superfund sites*
- Beneficial uses of solid waste
- Solid waste landfills post-closure stability
- *Fate and transport of contaminants in fractured rock systems*
- *Urban Contamination with Lead*
- *Landfills and associated subsurface reactions*
- *UST Corrosion*
- *Innovative Site Characterization and Treatment Technologies for Contaminated Sites*

### 4. **Air (and specifically ozone)**

- Achieve compliance with the newly lowered ozone standard, ozone modeling and monitoring issues
- Interstate and cross-border transport
- Emissions from grassland burning, wildfires and forest fires (atmospheric and AQ models) (**R3S&R**)
- Advanced monitoring and sensors (**R3S&R**)
- *Emissions monitoring*
- *VOC and NOx emissions from oil and gas operations*
- *Near Roadway Air Quality*